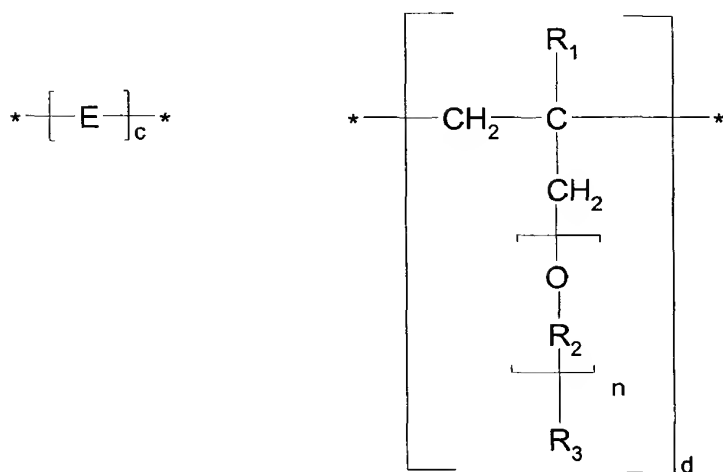


ABSTRACT

[0046] Methods of enhancing performance of a semi-permeable filtration membrane such as a polyamide R.O. membrane. A water soluble polymer is brought into contact with the membrane structure and is characterized by the Formula I

Formula I



wherein E is a repeat unit remaining after polymerization of an ethylenically unsaturated monomer or mixtures thereof; R<sub>1</sub> is hydrogen or C<sub>1</sub>-C<sub>4</sub> alkyl; R<sub>2</sub> is C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>1</sub>-C<sub>6</sub> alkylene, di-hydroxy substituted C<sub>1</sub>-C<sub>6</sub> alkyl, di-hydroxy substituted C<sub>1</sub>-C<sub>6</sub> alkylene, aryl, or mixtures thereof; n is 0 to about 100; R<sub>3</sub> is OH, SO<sub>3</sub>Z, OSO<sub>3</sub>Z, PO<sub>3</sub>Z<sub>2</sub>, OPO<sub>3</sub>Z<sub>2</sub>, CO<sub>2</sub>Z, or mixtures thereof; Z is hydrogen or a water-soluble cation; and the mole ratio c:d ranges from about 30:1 to 1:20 respectively.